Application No.: 10/523264

Docket No.: 13156-00002-USTF

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

e Patent Application of:

Gerrit Luinstra et al.

Application No.: 10/523264-

Confirmation No.: 1821

Filed: February 1, 2005

Art Unit: N/A

For:

CATALYST FOR THE CARBONYLATION

Examiner: Not Yet Assigned

OF OXIRANES

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this

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application by this firm) to our Deposit Account No. 03-2775, under Order No. 13156-00002-US.

Respectfully submitted,

Ashley I. Pezzner

Registration No.: 35,646

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicant

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PTO/SB/08a/b (07-05)
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Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	10/523264-Conf. #1821	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	February 1, 2005	
				First Named Inventor	Gerrit Luinstra	
				Art Unit	N/A	
(Use as many sheets as necessary)			necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	1	Attomey Docket Number	13156-00002-US	

U.S. PATENT DOCUMENTS						
Examiner Cite No.1		Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	AA*	US-6,262,278	07-17-2001	Jacobsen et al.		
	AB*	US-20030162961-A1	08-28-2003	Coates et al.		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)		Applicant of Cited Document		T⁵

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁰ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>					
	CA	Kamiya et al., "The Reaction Of Small Ring Compound With Carbon Monoxide The Carbonylation Of Oxirane", <i>Chemistry Letters</i> , pp. 1549-1552 (1980).				
	CB	Chem. Abstracts, 117, No. 26, Abstract No. 263541 (1992).				
	Ohba et al., "Oxalate-Bridged Dinuclear Cr(III)-M(II) (M = Cu, Ni, Co, Fe, Mn) Complexes: Synthesis, Structure, and Magnetism", <i>Inorg. Chem., Vol.</i> 32, pp. 5385-5390 (1993).					
	Atwood et al., "A New Class of Aluminum Cations upon Tetradentate (N2O2) Chelating Ligands", <i>Inorg. Chem.</i> , Vol. 35, pp. 63-70 (1996).					
CE Hinterding et al., "Regioselective Carbomethoxylation of Chiral Epoxides: A New R Enantiomerically Pure β-Hydroxy Esters", <i>J. Org. Chem., Vol.</i> 64, pp. 2164-2165 (1						
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Carbonylation of Simple and Functionalized Epoxides", J. Org. Chem., Vol. 66,		Lee et al., "Synthesis of β-Lactones by the Regioselective, Cobalt and Lewis Acid Catalyzed Carbonylation of Simple and Functionalized Epoxides", <i>J. Org. Chem.</i> , Vol. 66, pp. 5424-5426 (2001).				
	СН	Paddock et al., "Chemical CO <sub>2</sub> Fixation: Cr(III) Salen Complexes as Highly Efficient Catalysts for the Coupling of CO <sub>2</sub> and Epoxides", <i>J. Am. Chem. Soc.</i> , Vol. 123, pp. 11498-11499 (2001).				
	СІ	Getzler et al., "Synthesis of β-Lactones: A Highly Active and Selective Catalyst for Epoxide Carbonylation", <i>J. Am. Chem. Soc.</i> , Vol. 24, pp. 1174-1175, (2002).				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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Information Disclosure Statement (2 pages) IDS (Citation) by Applicant (7 References)